ACADEMIC LIBRARY CONTRIBUTIONS TO STUDENT SUCCESS: Documented Practices from the Field

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Executive Summary

Academic librarians are increasingly participating in the national dialogue about higher education effectiveness and quality. They are contributing to higher education assessment work by creating approaches, strategies, and practices that document the value of academic libraries to advancing the goals and missions of their institutions. By demonstrating the variety of ways that libraries contribute to student learning and success, academic librarians are establishing connections between different aspects of the library (e.g., instruction, reference, space and facilities, and collections) and numerous academic success factors (e.g., student retention, persistence, GPA, engagement, graduation, and career preparedness).

Assessment in Action

Over 70 higher education institutions from across North America recently completed team-based assessment projects that resulted in promising and effective approaches to demonstrating the library’s value to student learning and success. Assessment in Action: Academic Libraries and Student Success (AiA) is a three-year project sponsored by the Association of College and Research Libraries (ACRL) in partnership with the Association of Institutional Research and the Association of Public Land-grant Universities, and with funding from the U.S. Institute of Museum and Library Services. When the project concludes in 2016, over 200 higher education institutions will have participated in developing assessment methods and tools.

The methods and tools designed by the teams expand the resources that higher education institutions can share and use in their campus assessment initiatives. Many of the projects are replicable at other academic libraries or contain elements that can be adapted to a college or university’s unique institutional context.

Findings about Library Contributions

The findings from the assessment work of the first-year campus teams are impressive. Although these findings are not necessarily generalizable to all higher education institutions, they do point to important relationships between the library and student learning and success. Higher education institutions are encouraged to advance and refine assessment work that focuses on the academic library’s contributions to an institution’s mission and academic priorities. A few examples of the project findings are highlighted below.

1. Library instruction builds students’ confidence with the research process.
2. Library instruction contributes to retention and persistence, particularly for students in first-year experience courses and programs.
3. Students who receive library instruction as part of their courses achieve higher grades and demonstrate better information literacy competencies than students who do not receive course-related library instruction.
4. A library’s research and study space fosters social and academic community among students.
5. Library instructional games engage students, enhance information literacy skills, and increase positive attitudes toward the library and its staff.

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1 This executive summary is available online as a separate document, formatted to share broadly with campus stakeholders, see www.ala.org/acrl/files/issues/value/contributions_summary.pdf.
6. The library’s use of social media promotes awareness of the library and builds academic community among students.
7. Multiple library instruction sessions or activities in connection with a course are more effective than one-shot instruction sessions.
8. Collaborative instructional activities and services between the library and other campus units (e.g., writing center, study skills and tutoring services) promote student learning and success.

Findings about Higher Education Assessment
The experiences of the AiA teams led to several recommendations for fostering evidence-based demonstrations of library value at higher education institutions. Six of the strategies are highlighted below. A more detailed discussion of the recommendations and strategies are available in the full report, *Academic Library Contributions to Student Success: Documented Practices from the Field*.

1. Library assessment is most effective when it aligns with institutional priorities and mission.
2. Library assessment that includes the participation of representatives from other campus departments and units (e.g., faculty, institutional research, academic administration, student services) increases the quality of the assessment design and results.
3. Libraries can contribute important data about student learning and success to an institution’s accreditation self-study and review.
4. A mixed-methods approach to library assessment strengthens and enriches findings about library impact.
5. Academic librarians recognize how assessment activities advance an institution’s academic mission and are poised to lead library assessment initiatives.
6. Assessment achieves sustainability and meaningful integration with the library’s services and programs when it is a designated responsibility of one or more librarians.

More Information
Read the full report, *Academic Library Contributions to Student Success: Documented Practices from the Field*, for ideas and strategies that promote evidence-based demonstrations of an academic library’s contributions to student learning and success. Visit, adapt, and use the assessment methods and tools developed by the AiA campus teams that are available in a searchable [online collection](http://www.ala.org/acrl/files/issues/value/contributions_report.pdf).

About ACRL
The Association of College & Research Libraries is the higher education association for librarians. Representing more than 11,000 academic and research librarians and interested individuals, ACRL (a division of the American Library Association) is the only individual membership organization in North America that develops programs, products, and services to help academic and research librarians learn, innovate, and lead within the academic community. Founded in 1940, ACRL is committed to advancing learning and transforming scholarship.
Introduction

Academic librarians are connecting with campus partners in novel ways to examine and discover how they bring value to their institutions. To foster these partnerships, ACRL, with its partners the Association of Institutional Research and the Association of Public Land-grant Universities, and with funding from the U.S. Institute of Museum and Library Services, launched “Assessment in Action: Academic Libraries and Student Success” (AiA) to achieve three primary goals:

1) Develop academic librarians’ professional competencies needed to document and communicate the value of the academic library in relation to an institution’s goals for student learning and success.

2) Strengthen collaborative relationships with higher education stakeholders, including campus faculty, academic administrators, and assessment officers.

3) Contribute to higher education assessment by creating approaches, strategies, and practices that document the contribution of academic libraries.

The three-year AiA program is helping hundreds of postsecondary institutions of all types develop campus partnerships to promote the engaged library of the future. Its design is based on input from two national summits held in response to recommendations to build librarians’ capacity in this area. (See APPENDIX A: ACRL and the Value of Academic Libraries Initiative for an overview.)

Each selected institution has a team with a librarian and at least two people from other campus units. Team members include teaching faculty, other librarians, and administrators from campus units such as the assessment office, institutional research, the writing center, academic technology, and student affairs. The librarians participate in a formal 14-month professional development program during which they lead their campus teams in the development and implementation of a library value project that is informed by skill-building activities and aims to contribute to assessment activities on their campus.

Throughout the project, the librarians are supported by a blended learning environment and a peer-to-peer network. This environment provides a framework for the action learning projects and is a central component of AiA. Many of the inquiry methods and processes developed during the first year of the program exemplify aspects of action research. As Shani and Pasmore explain, “Action research may be defined as an emergent inquiry process in which applied behavioral science knowledge is integrated with existing organizational knowledge and applied to solve real organizational problems.”2 Hallmark characteristics of action learning that bridges theory to practice are its grounding in the context of practice-based inquiry, the use of systematic methods of data collection and analysis to inform and influence practice, and the importance of collaboration with one’s colleagues to produce meaningful results. The attention given by academic librarians to demonstrating library value is an example of a practice-based challenge that is well suited to this approach. The AiA learning community fosters a dynamic, active form

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of learning among colleagues that combines small group engagement in problem solving through questioning, testing assumptions about practice, and reflecting on what has been learned.

Through the AiA learning and collaborative activities, the campus teams consider different aspects of the academic library (e.g., collections, space, instruction, reference, etc.) and their relationship to student learning (e.g., course, program, or degree learning outcomes) and/or success (e.g., student retention, completion, or persistence). The methods and tools that are designed and applied to practice expand the resources that academic librarians can share and use in their campus assessment initiatives. Many projects are replicable at other libraries or contain elements that are transferable to different institutional settings.

The project illuminated the importance of closing the assessment cycle by reporting results and making decisions based on those results.

– Webster University

The results from the first year of AiA make it clear that the contributions of academic libraries to student learning and success are gaining recognition on campuses across North America. The numerous library factors investigated and the different assessment methods used by the 75 teams selected to participate in AiA create an extensive collection of evidence-based practices that benefits the academic library and higher education communities.

This report focuses on the assessment projects conducted by those teams that participated in the first year of the program, from April 2013 to June 2014. Of the 75 teams selected, 74 presented posters sessions at the 2014 ALA Annual Conference in Las Vegas, Nevada, June 27 or 28, 2014. In addition, each team leader completed a final project descriptive report, which is fully searchable in an online collection, and includes images of the posters and abstracts. Each team leader was also asked to complete a reflective report and, while these individual reports are kept confidential, aggregate and anonymous comments from the reports have contributed to this synthesis. (See APPENDIX B: Final Report Template for AiA Team Leaders for reporting questions.) This publication is also informed by results from two focus groups undertaken in June 2014 with a total of 39 AiA year-one team leaders.

As the AiA team leaders prepared their posters and reports throughout spring 2014, they supported one another through a structured process that started with peer feedback within small cohort groups. After the team leaders made revisions, two additional peer reviews occurred across the cohorts. Team leaders made appropriate revisions to their posters and project reports based on this feedback. The iterative process ensured that the final posters and project reports were robust and clear. This publication highlights some of the most significant findings of these

3 The second year AiA teams are already well under way, working from April 2014 to June 2015. The online application to participate in the third year of AiA (April 2015 to June 2016) was available in mid-January 2015 and due in early March 2015. Read more about applying for the third year at www.alas.org/acrl/AiAapplication.

projects and also discusses just a few of the projects to provide a snapshot view of the rich variety of assessment methods and designs that offer effective and promising approaches for demonstrating library value. Recommendations for fostering evidence-based library advocacy and campus collaborations that emerged from the experiences of the AiA teams are also presented. In addition, this report describes a “community of practice” that is developing around academic library assessment as a result of the AiA librarians’ collaborative learning experiences.

The primary audience for this report is academic librarians and library administrators. A secondary audience – higher education assessment professionals and academic administrators – will likely find the recommendations and project results useful in their assessment work on campuses.

**Institutional Teams: Year One**
The institutional teams for the first year of the AiA program were selected through a competitive application process designed to ensure representation from an array of geographic regions and postsecondary institutions.

**Figure 1. Map of Teams Participating in First Year of AiA.**

The institutions came from 29 states and 3 Canadian provinces, spanning 7 time zones, from Hawaii to Nova Scotia. Colleges included associate’s (10), baccalaureate (7), master’s level (31), tribal (1), special focus (1), doctoral/research universities (6), and research universities (18). FTE enrollment size ranged from under 2,000 to over 20,000 students. The institutions are also represented by a variety of different accrediting bodies, including seven U.S. regional and four Canadian, as shown in Figure 2.⁵

⁵ For a full list of all participating institution names and locations, see [www.ala.org/acrl/AiA](http://www.ala.org/acrl/files/issues/value/contributions_report.pdf).
Librarians at these institutions recognized the growing importance of assessment on their campuses and saw AiA as an opportunity to position the library as a key player. While some of the AiA participants came from libraries with active assessment programs, many librarians were embarking on an assessment project for the first time. AiA provided a supportive and collaborative learning community for developing the skill sets needed to lead a campus project team as it used evidence-based approaches for demonstrating library value.
As part of the AiA application process, the librarians had to indicate an initial area of focus for their assessment project and identify the members of their campus team. The librarians worked together as a cohort to learn assessment methods, project management techniques, and strategies for aligning their library with their institution’s mission and academic priorities. During this initial project phase, the librarians also collaborated with their campus team members to design an assessment project that considered the library’s potential contribution to student learning and success on their campus. The teams then narrowed their focus to a specific library factor and a discrete aspect of student learning and success to be assessed. A primary inquiry question was formulated that posed a possible connection between the library and student learning and/or success. Each campus team created a question that was unique to its library and its institutional context. The list of ten primary inquiry questions below exemplifies just some of the many library impact areas investigated by the campus teams.

- Is online instruction or conventional classroom training more effective in delivering information literacy instruction to General Studies Portal 188 and English 102 courses? (University of Nebraska-Kearney)

- Does exposure to primary sources through library instruction and class assignments improve students’ abilities to think critically and creatively? (Appalachian State University)

- How do students in English Composition classes who are taught using the flipped classroom model of instruction compare with those in traditional one-shot classes in their ability to locate and cite information effectively? (Middlesex Community College)

- What is the most effective role a librarian can play in information literacy instruction to students of English 102: designer of online curricula, moderator in a flipped classroom, or presenter in a traditional classroom? (Northeastern Illinois University)

- How does the usage of our dedicated technology facilities contribute to the success of Miami University student scholarship and research? (Miami University)
• How do existing library services (e.g., the BIO126 information literacy program, library resources, and reference help) support the student learning outcomes designed by librarians and science faculty? (Greenfield Community College)

• What can we learn about the impact of the library on student success by examining use of eResources and student GPA? (York University)

• How effective were the library’s UNIV100 games in improving student information confidence? (Radford University)

• Does information literacy instruction and access to library resources and services help novice Spanish-language learners meet the American Council on the Teaching of Foreign Languages (ACTFL) Standards for Foreign Language Learning? (Stonehill College)

• How can the library most effectively adapt its information literacy instruction program to best address the growing presence of multimedia in student research projects? (Mercy College)

The question posed by a campus team guided decisions about strategies for the inquiry process and the type(s) of data needed to answer the question. Depending on the question, the collection of data may have reflected direct or indirect measures of student learning and success. Direct measures typically refer to actual student work and tend to capture relatively objective data about competencies, skills, and knowledge. Indirect measures, on the other hand, represent types of data that do not measure actual abilities or competencies. A student’s portfolio, for example, would be a direct measure; a survey of that student’s perceptions of his or her skills would be an indirect measure of learning. Seventy-four direct measures (e.g., research papers/projects, other class assignments, or student portfolios) were used for assessment data, and 54 indirect measures (e.g., test scores, GPA, or retention rate) provided data.

Again, depending on the inquiry question, the assessment method(s) selected by the teams varied. While some teams focused on quantitative methodologies (e.g., comparison of circulation statistics with GPA), other teams used qualitative approaches (e.g., focus groups, reflection essays). Many of the teams decided to use more than one assessment method to investigate possible impact, resulting in a mixed-methods approach that could expand and enrich their findings. Changes in GPAs, for example, might be supported and augmented by student comments gathered during focus groups. All of the projects, whether using a quantitative, qualitative, or mixed-methods approach, advance higher education assessment work by creating and examining approaches, strategies, and practices that document an academic library’s contribution to students’ academic success. They move the profession’s understanding of library value from assumptions or anecdotal observations about library impact to systematic methods for data collection and analysis. It should be noted that the teams have been careful to report their findings as relationships and correlations – not claims of causation – between library factors and
academic outcomes. The assessment methods and tools that were used are summarized in the following table.

**Table 1. Assessment Methods and Tools.**

<table>
<thead>
<tr>
<th>Assessment Methods and Tools</th>
<th>#</th>
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</thead>
<tbody>
<tr>
<td>Survey</td>
<td>41</td>
</tr>
<tr>
<td>Rubric</td>
<td>40</td>
</tr>
<tr>
<td>Pre/Post Test</td>
<td>24</td>
</tr>
<tr>
<td>Other (e.g., correlational analysis, exam, skill demonstration)</td>
<td>20</td>
</tr>
<tr>
<td>Interviews</td>
<td>13</td>
</tr>
<tr>
<td>Observation</td>
<td>11</td>
</tr>
<tr>
<td>Focus Group(s)</td>
<td>10</td>
</tr>
</tbody>
</table>

The projects described in the next section highlight different assessment methods and types of data collected. Keep in mind that only 9 of the 74 projects are presented and that the description of each project is brief. The full reports are posted in the searchable online collection.

We used multimodal techniques to see student work, student perceptions, faculty/librarian perceptions, and institutional perspectives, giving us a fuller picture of student learning.

– Greenfield Community College

Sharing the results of this project with the liaison librarians showed them how keeping accurate statistics can help us demonstrate our own role in student success, as well as helping position them as assessment partners with their assigned colleges and departments.

– University of North Carolina-Charlotte

Additional in-depth descriptions and discussions of academic library assessment methods will be included in a forthcoming book ACRL will publish with one AiA team leader as editor and other team leaders as contributors. The AiA facilitators are also working with the editors of ACRL’s premier scholarly journal, *College and Research Libraries*, to consider a special 2016 issue focused exclusively on AiA projects as demonstrations of action research.

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6 The totals in this table exceed 74 (i.e., the number of AiA teams reporting), because many teams used more than one assessment method and/or type of measure.

7 Additional in-depth descriptions and discussions of academic library assessment methods will be included in a forthcoming book ACRL will publish with one AiA team leader as editor and other team leaders as contributors. The AiA facilitators are also working with the editors of ACRL’s premier scholarly journal, *College and Research Libraries*, to consider a special 2016 issue focused exclusively on AiA projects as demonstrations of action research.
• Twenty-four institutions used a pre-test/post-test methodology to document changes in students’ information literacy skills. Dakota State University, for example, focused its project on the impact of library instruction on the learning of research skills by master’s degree-level students in the institution’s online Educational Technology program. After completing an online library instruction tutorial as part of a research methods course, test scores increased. In Dakota State’s project report, the team librarian noted the value of collaborating with the various campus units on the assessment project, “An important lesson learned from this project is the fact that when assessing the effect of the library on student learning, the library cannot do it alone. It takes the work of others within the university to truly do the work and collect meaningful data and analyze the effect.”

• The development of an information literacy or similar rubric became a means for 40 libraries to gather data related to information literacy competencies. Claremont Colleges Library used a rubric to document that the information literacy competencies demonstrated in students’ research papers were statistically significantly higher when a librarian was involved in first-year courses and syllabi design than with one-shot instruction. In addition, the rubric is used to assess senior theses, which provides the library with an opportunity to compile longitudinal data related to students’ attainment of information literacy skills at the colleges.

• The University of Wisconsin-Eau Claire used a rubric in tandem with student reflection papers to assess the impact of the library on the development of information literacy skills by students who are enrolled in first-year composition courses. The AiA team was particularly interested in knowing if students learn when librarians collaborate with the faculty to introduce information literacy concepts. The rubric assessed students’ skills related to attribution, communication of evidence, and evaluation of information. After analyzing the rubric scores from the data sample, the team concluded that greater integration of the library into writing courses will help students to apply their information literacy learning in all reading and writing experiences. End-of-semester reflection essays by the students also reinforced this conclusion. Those students who believed they achieved increased information literacy also produced research projects that received higher scores on the information literacy rubric.

• DePaul University developed a rubric to examine the reflective essays of first-generation students who participated in a self-guided library activity. The university’s mission articulates a commitment to educating first-generation college students. First-generation students, however, can feel like outsiders and lack a sense of “belonging,” which may contribute to academic disengagement. The library developed instructional materials for peer student leaders to deliver and grade as part of the university’s First-Year Experience program. After participating in a self-guided library activity and reflecting on the process, would the students who complete the assignment be able to articulate how the library contributed to their success as learners? After using the rubric to score 97 reflective essays, the project team noted that the independent learning activities, when coupled with reflection, are an effective means for orienting students to the library and to academic life in general. Students reported an affective change towards library use, i.e., from anxiety to pride, and they were able to articulate multiple ways that the library can contribute to
their academic success. As the team librarian noted, “Reflection papers may help librarians gain insight into how students navigate discovery systems and physical spaces, and students’ affective relationship with libraries and research.”

- **Grinnell College** was particularly interested in designing a student-centered approach to assessing the impact of research instruction sessions on student learning. The campus team asked students and faculty (rather than librarians) to rate student research bibliographies, and they surveyed the students about their research process. Although students were less confident in rating the timeliness and authority of the sources on their revised bibliographies, the students did revise their bibliographies following a research instruction session. Students also reported that they learned strategies for searching and evaluating sources.

- **Grand Valley State University** recently inaugurated its Knowledge Market, a collaborative service offered by the library, writing center, and speech lab. At the Knowledge Market, students can get help with assignments from peer consultants – other students – trained in research, writing, and speech presentation. The AiA team was interested in assessing the impact of the peer consultant program on students’ attitudes, behaviors, knowledge, skills, or status. The team gathered descriptive and perceptual data from the research consultations, primarily through surveys. It was a highly collaborative method that required the various service partners to share data and methods. For example, lists of academic departments whose students used the service were shared with instruction librarians, which enabled them to provide timely and targeted instruction to high-need courses. Students reported high satisfaction with the Knowledge Market services, and the assessment findings were used to justify expansion of the services into freshman composition courses and to other campus locations. The peer consultants reported significant gains in communication skills, problem solving, flexibility, and adaptability. This collaborative assessment effort will be ongoing, and the lead team librarian reported, “The original Assessment in Action partners continue to discuss long-term assessment of the Knowledge Market and are using the independent program evaluations conducted this past year to inform that future planning.”

- Prior to participating in AiA, **Lasell College** had focused its assessment activities on first-year students. The AiA project provided an opportunity to expand the library’s assessment of students’ information literacy skills by investigating the competencies of seniors. More specifically, the project team focused on seniors’ critical thinking skills in relation to research. The project team implemented a mixed-methods assessment approach – focus groups, electronic surveys, and citation analysis – and found that assessment of learning is most effective when these multiple tools and data sources are used in combination. Results from the project indicate that students’ information literacy skills vary, depending on requirements of their academic discipline.

- The AiA team at **Murray State University** aligned their assessment project with the institution’s strategic priority on student retention. It used multiple library data sources (e.g., circulation, interlibrary loan, information literacy participation, lab and proxy
logins, etc.) to assess the library’s contribution to student retention. As the lead team librarian noted, “Prior to this project, we were making decisions about collections and instruction based on tally marks of use, and not knowing the depth or breadth of use.” By triangulating the data sources, the team discovered that students who used the library in some way were nearly twice as likely to be retained from one semester to the next than students who did not use the library.

- Information literacy is one of Anne Arundel Community College’s ten core competencies for graduating students. Given the importance of information literacy as a campus-wide core competency, the project team designed an assessment process that encompasses a combination of direct and indirect measures to investigate whether students are learning appropriate information literacy skills by the time they graduate. Numerous possible relationships were considered and will be investigated as the team continues to gather and review data: 1) evidence of student information literacy skills from student artifacts and the strength of a research assignment’s directions, 2) evidence of student information literacy skills from student artifacts and student demographics, 3) frequency of faculty/librarian interactions and faculty confidence in assessing student information literacy skills, and 4) frequency of faculty/librarian interactions and course demographics (e.g., course discipline, delivery method, and duration). During the project’s timeframe, only one set of measures could be gathered, but additional data will be marshalled to reach the two-semester benchmark established by the assessment design.

Library Factors and Connections to Student Learning and Success
Student learning and success encompasses a multitude of possible outcomes, and higher education institutions often define the outcomes in slightly different ways. Outcomes are typically delineated in relation to such factors as student enrollment, retention and persistence, performance and achievement, career preparedness, and graduation. Librarians are finding that they need to break apart the complex and interrelated aspects of learning to determine library impact. In addition, the various library factors that might be investigated have different types of impact on student learning and success. The primary learning outcomes and library factors considered in the AiA projects are summarized in Figures 3 and 4.8 Thirteen projects are described in more detail to spotlight different ways that academic libraries are contributing to the academic success of students.

This project provided some evidence via GPA increases and student feedback, that our RA [research assistance] service is having a direct impact on academic performance and personal connections to the institution which then impact student retention.

– Dalhousie University

8 Note: The totals in each figure exceed 74 (i.e., the number of AiA teams reporting), because the teams often examined more than one academic outcome and/or library factor.
Figure 3. Primary Academic Outcomes Examined.

![Primary Academic Outcomes Examined](image1)

Figure 4. Primary Library Factors Examined.

![Primary Library Factors Examined](image2)
Library Instruction and General Education

To date, our project has significantly increased the library’s role in assessment of General Education. …This helps establish the library as an integral part of the campus culture of assessment of student learning outcomes, rather than an auxiliary unit assessing its own objectives.

– University of Idaho

To reach a high number of students and to establish a foundation of information literacy competencies for students as they progress through their academic careers, many academic libraries put a priority on instruction for students in general education, core curriculum, and required writing or English composition courses. Several AiA teams focused their assessment projects in this area by investigating the contribution of library instruction to the general education curriculum (31 teams) and English composition courses (18 teams), as exemplified by the two projects described below.

- The project team at Kapi’olani Community College was interested in aligning their assessment with the college’s general education outcome goals related to critical thinking and inquiry and its strategic goal to support the success of Native Hawaiians. The team’s guiding question was: How does customized library instruction for Hawaiian Studies students impact the attainment of information literacy skills? The library redesigned a library instruction learning tool called the Research Challenge and customized it for the Hawaiian Studies 270 course. The findings, collected from evaluation of student work using a rubric as well as student survey results, showed that the majority of students met or exceeded expectations for proficiency in finding sources, using these sources, and determining if the sources met their research needs. The assessment data also indicated competency areas that need improvement, and the librarians plan to review the library instruction program based on these results.

- Southern Connecticut State University connected its assessment project to the institution’s strategic priority on student success as demonstrated by retention and graduation rates. The team investigated whether freshmen enrolled in classes that schedule library instruction sessions experience improved student success metrics (e.g., GPA, retention, engagement, iSkills score, etc.). Preliminary findings show that students in classes that have library instruction sessions are developing better library and information literacy skills than those students in classes that do not schedule a library session. The lead librarian also noted, “Getting the library involved in our campus’s existing culture of assessment raises our profile and will ultimately demonstrate our value. . . . Our assessment will make it much easier to demonstrate the library’s place in the university’s commitment to student success.”
Library Instruction and High-Impact Education Practices
The library’s contribution to an institution’s high-impact educational practices was considered by several AiA project teams. High-impact practices are focused, intensive instructional strategies aimed at increasing retention and student engagement, and they typically include first-year experiences, critical thinking courses, core curricula, and undergraduate research and writing intensive courses.\(^9\) Three projects are highlighted to demonstrate this aspect of student learning and success.

- **Arizona State University** aims for a 90% persistence rate among its freshmen. With that goal as a framework, librarians collaborated with faculty to incorporate information literacy skills into the design of a new critical thinking course for at-risk freshmen. The project team documented that students who successfully completed the course persisted at a higher rate than those who did not take the course. More specifically, students who completed the course demonstrated increased knowledge of information literacy skills and higher levels of confidence in their information literacy skills, and these students also recognized the value of information literacy skills to their current and future academic work.

- When the **Pacific Lutheran University** team started their AiA experience, the librarian team leader knew that the university’s First-Year Experience program had a strong assessment component, making it an ideal partner for the project. Building on this strength, the project team investigated the difference in impact on student learning of one-shot library instruction in comparison to multiple, shorter information literacy sessions. Data gathered from a citation analysis of final projects and a content analysis of student reflection surveys documented that students who received multiple information literacy sessions used library resources at a higher rate than students who participated in the one-shot sessions. The students receiving multiple sessions also reported using a greater variety of search strategies to find a broader range of sources.

- To promote persistence from semester to semester among students in developmental English courses, the AiA team at **Santa Barbara City College** was interested in assessing the library’s impact on students’ sense of belonging to the college community. They offered step-by-step customized information literacy instruction and promoted strong, positive relationships between the students and the librarians. They discovered that customized library instruction offered in multiple workshops can enhance the notion of librarian as coach and a source of support for student success, reinforce skills development, and encourage positive perceptions of library.

Library Instructional Games
As an alternative to traditional face-to-face library instruction sessions, academic libraries are increasingly creating interactive instructional games to promote information literacy competencies. As the findings from two AiA projects noted below demonstrate, library instructional games engage students, enhance information literacy competencies, and increase positive attitudes toward the library and its staff.

• The Indiana University of Pennsylvania library developed a set of student-centered library outreach games, activities, and marketing materials in collaboration with the Student Affairs Division to engage students and promote the library in nonlibrary settings. Through self-reports by undergraduate students after they participated in library games or attended library events, the project team learned that students reported gains in information literacy skills, positive attitudes towards the library and its staff, and an increased likelihood of return visits to the library.

• Radford University developed two instructional games, the Library Challenge Game and the Mobile Scavenger Game, to address concerns about library anxiety among freshmen. The project team documented, through the use of an observational assessment rubric and a student survey, that the games did have a positive impact on the participating students’ confidence related to use of the library and its resources. The project also demonstrated the library’s role as an active contributor to the institution’s increased attention to assessment across the campus. The team librarian found that “[t]he library games can be assessed in a way that is meaningful to the stakeholders both within and outside of the library.”

Information Literacy and Multimedia Sources
Locating, evaluating, and using print resources, such as books and journal articles, have been a central focus of information literacy instruction. As students increasingly use multimedia sources in their coursework and research projects, academic librarians are considering how library instruction may need to be modified to take these additional sources and formats into account. One AiA team investigated this trend.

• Mercy College decided to examine how the library can most effectively adapt its information literacy instruction program to address students’ increased use of multimedia sources. Their findings in a pilot assessment demonstrated results similar to their earlier assessment of information literacy instruction with print-only research projects. Most notably, students still struggle in the area of attribution. Their project reinforced the importance of expanding library instruction to include the growing repertoire of information sources that students may use.

Flipped Classroom Library Instruction
Some libraries are adapting the flipped classroom model to their instruction program by providing online information literacy tutorials that students view on their own and then using scheduled time in the library for students to work with librarians on developing research strategies and searching databases. Middlesex Community College focused its assessment project on an investigation of this instructional method.

• At Middlesex Community College, English Composition students have requested more hands-on time in the library, which gave the AiA team an opportunity to test the effectiveness of a flipped classroom model of instruction. Prior to participating in a class session in the library, students viewed online information literacy tutorials. The team found that students who were taught using the flipped classroom model of instruction
achieved a higher level of mastery compared to students who received traditional one-shot library instruction. However, students who participated in the flipped classroom model reported a preference for the traditional lecture-style library class sessions, a finding that the library staff plans to investigate further.

**Library Space and Learning**

While the majority of AiA project teams investigated the impact of the library’s reference, instruction, and information literacy program, 16 teams took into consideration other factors (e.g., collections, personnel, discovery) that may contribute to student academic success. Five of the 16 teams looked at the relationship of the library’s physical facilities and space to student learning and success. Three sample projects are described below.

- **Central Washington University** investigated the impact of the Academic and Research Commons on student success for its AiA project. The Commons is a “one-stop shop” with tutoring services, reference librarians, and career services. Assessment results demonstrated that student performance in English 101 courses and the students’ confidence levels regarding academic research and writing were higher when student use of the Commons’ space and services was integrated into the course activities.

- **Miami University’s Information Commons** and other dedicated technology spaces provide students with software, hardware, and staff expertise to assist with their completion of basic and complex academic projects. To move beyond simply collecting usage statistics, the AiA team documented that students who used the facilities were nearly four times more likely to score higher on a visual literacy rubric than those who did not.

- **The University of Manitoba** Libraries sponsors the “Long Night Against Procrastination” each semester. It is an all-night event during which the library provides its conventional services of reference, research assistance, and instruction – but during nontraditional hours. Before conducting an assessment of this event, the librarians assumed that the reference and writing services would be the most valuable factor for students. The AiA team discovered, however, that holding the event in the library produced the most significant impact, because the library space and facilities fostered social and academic support and community.

**Library Use of Social Media**

It is not uncommon for libraries to use social media, such as Facebook and blogs, to communicate with students and to promote library services and resources. The potential relationship of a library’s social media communication to student academic success was examined by one of the AiA teams and is described below.

- **Montana State University** library uses social media, particularly Twitter, to engage students and to create avenues for instruction and library awareness. The AiA team decided to assess the impact of the library’s social media program. Through interviews and focus groups with students, the team found that the social media program was
particularly effective in building community and that this community-building contributed to student learning.

In terms of student learning and success, 75% or more of the students thought that the course contributed to their learning on five items measuring information literacy.

– George Mason University

Library Leadership and Evidence-Based Advocacy

Leadership within the Library
At those libraries where some staff have designated assessment responsibilities, the AiA project was easily integrated into ongoing library assessment activities and evaluations of services, instructional programs, and collections. These libraries, in effect, already embraced a culture of assessment. For a significant number of the AiA librarians, however, assessment was not conducted on a continuous basis at their libraries. The AiA project put them in a new role in relation to the rest of the library staff. Several of the AiA librarians, for example, reported that their project work was somewhat isolated from other library activities. At times, the purpose of the project and the benefits to be gained from the assessment initiative were questioned by staff. As one librarian said, “[Some] library faculty are skeptical. . . . They did not want me to assess the instruction program.”

The assessment projects required that the librarians increase communication and collaboration with other library staff. These interactions provided opportunities to inform the staff about the assessment process and its role in improving library services and resources. One of the team librarians commented, “Librarians have realized that talking about the value of students having a library experience as an undergraduate student is an important conversation we need to continue to have and explore.” Many of the librarians reported that they are now considered the go-to person for assessment activities at their library. They also developed an awareness and understanding of the importance of continuous assessment, rather than relying on the results of individual, and often disconnected, assessment activities.

Leading the Project Teams
As noted earlier, the composition of the AiA project teams include at least two team members who are not part of the library’s staff. The librarians who participated in the first year of the AiA program frequently mentioned the benefits of having different perspectives brought into the team discussions. Through their collaboration with the team members, the librarians learned about the functions and priorities of other campus units. One librarian commented, “My self confidence in interacting with individuals outside the library (e.g., campus administrators, faculty members)
has increased significantly.” Likewise, the librarians reported that team members who were not librarians gained an awareness of the library, particularly in terms of its contribution to student learning and success.

Table 2. AiA Team Members.

<table>
<thead>
<tr>
<th>AiA Team Members</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Faculty</td>
<td>54</td>
</tr>
<tr>
<td>Other Librarian</td>
<td>51</td>
</tr>
<tr>
<td>Assessment Office</td>
<td>28</td>
</tr>
<tr>
<td>Institutional Research</td>
<td>28</td>
</tr>
<tr>
<td>Library Administrator</td>
<td>21</td>
</tr>
<tr>
<td>Other (e.g., speech lab, teaching/learning center, doctoral student)</td>
<td>19</td>
</tr>
<tr>
<td>Campus Administrator</td>
<td>16</td>
</tr>
<tr>
<td>Student Affairs</td>
<td>12</td>
</tr>
<tr>
<td>Writing Center</td>
<td>10</td>
</tr>
<tr>
<td>Information/Academic Technology</td>
<td>5</td>
</tr>
</tbody>
</table>

Several librarians mentioned the value of having teaching faculty on the assessment team. While senior academic administrators may lend a certain cachet and leverage, the teaching faculty were particularly attuned to the potential instructional role of librarians and were helpful in designing assessment instruments that measure and document learning outcomes. As one librarian commented, “Teaching faculty believe in the value of information literacy.”

During the 14-month project, several teams faced changes in membership. In a few cases, librarians moved on to new positions. More frequently, however, it was other members of the team who had to leave and be replaced. With these changes, group dynamics came into play. The challenges of accommodating a new team member often had more to do with the relationship aspect of group dynamics (i.e., personalities, styles of communication) than with the task aspect of group dynamics (i.e., who is doing what work), and the AiA librarians had to be proactive to manage the situation, as reflected by a librarian who commented, “I feel more confident in my ability to take a project from idea to completion and to engage with other professionals on campus to make it work.”

Sustaining project momentum was one of the most significant challenges encountered by the librarians leading the teams. After the initial enthusiasm of launching the project, lack of time and competing priorities often took their toll. The librarians reported that when this type of disengagement started to emerge, they realized that their role as team leaders necessitated intentional and directed facilitation, including establishing a clear timeline for tasks, delegating responsibilities, and providing frequent updates. They became aware of the need not only to facilitate the group’s activities but also to lead the collaboration.
Forging Partnerships across the Campus

Rockhurst's AiA project facilitated collaboration between departments and schools at the university and serves as a great example of a cross-campus assessment project.

– Rockhurst University

The librarians reported that the visibility of the library and librarians as partners on campus increased greatly as a result of the AiA projects. The word visibility was used again and again by the AiA librarians in their project reports. Campus administrators knew about the AiA project, because they had to sign off on the application and agree to support the assessment project (i.e., expenses, access to resources). These administrators talked with other campus administrators and faculty about the project. In addition, the team members from the different campus units talked about the project with their colleagues.

Many of the librarians also gave presentations about their project at various campus events. One librarian commented, “I was asked to speak on a panel about the progress of our project at a [workshop] last fall. This brought positive attention to the project and the library.” In fact, administrators and academic staff often now mention the AiA project as a model and encourage others on campus to consult with the librarians to learn more about assessment. Institutional buy-in from campus administrators and the librarians’ work with team members have expanded the library’s sphere of influence on many campuses, as reflected in this statement by one of the librarians: “[AiA] signaled a change in focus for [our library], from assessment ‘for internal use only’ to assessment for internal and external stakeholders.”

Our experience with this project (which will be ongoing) and knowledge of assessment principles has boosted our profile and we are now being called upon to provide assessment guidance with related projects.

– Dalhousie University

Creating a Community of Practice for Academic Library Assessment

Most importantly, I’ve identified AiA participants, both in and outside my cohort, working on assessment activities similar to ours. I feel I have a network of people I can collaborate and brainstorm with.

– AiA librarian
(from reflective report)

In the AiA learning cohorts and within the larger AiA learning community, sharing ideas and lending general support were critical to the success of most of the projects. The librarians had shared goals and were pursuing inquiry through a collective learning experience. They reported that the face-to-face professional development sessions, in particular, enhanced collaboration.
The online learning was efficient and promoted communication but was not always the preferred mode for collaboration. As some librarians noted, participation in the online environment was occasionally uneven. While supportive communication and collaboration were certainly helpful throughout the program, critical commentary was also valued. The librarians noted the usefulness of the peer review process when designing their research questions and developing their poster presentations. Peer review seemed to be best when it integrated knowledge sharing and encouragement with structured criticism and feedback.

The AiA experience has also fostered networking among the librarians. A number of librarians reported that they are partnering with one another to prepare conference presentations and write professional journal articles. Thus, collaboration is being sustained beyond the scheduled AiA activities.

AiA was designed to foster a community of practice around assessment work in academic libraries. Etienne Wenger-Trayner, who originated the term *Communities of Practice*, defines it as “[A group] of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly.” The review of AiA project reports indicates that a community of practice does seem to be developing. The librarians are sharing knowledge and experience as they work toward a common goal. As one librarian explained, “I know how collaborative [assessment] has to be to succeed. I know it’s OK if something doesn’t work the first time. I know colleagues from AiA that I can correspond with!” Another librarian also focused on the benefits of being part of an assessment community that extends beyond the AiA experience, “My AiA experiences have made me aware of how important it is to have a group of people all working towards a purpose together . . . both from AiA and my colleagues.” As exemplified by these comments, the librarians are referencing the AiA learning community as a source for collaboration and building one’s personal and professional capacity to lead academic library assessment activities at their institutions.

> I think the conversations that stem from all of our projects [have] been really important . . . and the community created a forum for thinking about other projects and asking questions about other projects.

> — AiA librarian (from reflective report)

**Conclusion**

The assessment findings of the 74 projects from the first year of the AiA program address numerous aspects of student learning and success on campuses across North America, and they document multiple ways that academic librarians can engage and lead campus representatives in library assessment initiatives. The projects provide methods and tools that can be replicated or adapted to a wide variety of higher education settings and context. As a result, academic

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librarians can leverage and expand their role in assessment work at higher education institutions. In addition, the AiA projects advance awareness, understanding, and collaboration among higher education stakeholders around issues of library value on campuses and in the wider postsecondary education community.
APPENDIX A: ACRL and the Value of Academic Libraries Initiative

The AiA program is grounded in several ACRL initiatives, dating back to the early 1980s with the publication of *Measuring Academic Library Performance: A Practical Approach*, an assessment manual that sought to “stimulate librarians’ interest in performance measures and to provide practical assistance so that librarians could conduct meaningful measurements of effectiveness with minimum expense and difficulty.” More recently, one of the three goal areas identified in the association’s 2011 strategic plan, *The Plan for Excellence*, focuses on the value of academic libraries, and a standing committee – the Value of Academic Libraries – was established to develop and implement recommendations. In ACRL’s 2012 membership survey, members were asked to select the top three issues facing academic and research librarianship today, and “Demonstrating the value of the library and librarians” was cited as a top issue facing all member segments, regardless of job title or type of library.

ACRL published *Value of Academic Libraries: A Comprehensive Research Review and Report* in 2010 as a review of the quantitative and qualitative literature, methodologies, and best practices currently in place for demonstrating the value of academic libraries. The report made many recommendations, and a key opportunity where ACRL has great strength was the recommendation that the association, “create a professional development program to build the profession’s capacity to document, demonstrate, and communicate library value in alignment with the mission and goals of their colleges and universities.” To understand how to shape such a program, ACRL convened two national summits, which were held November 29 to December 1, 2011 in Chicago, to explore and discuss strategies that prepare the library community to document and communicate the library’s value in advancing the missions and goals of their colleges and universities. ACRL partnered with the Association for Institutional Research, the Association of Public and Land-grant Universities, and the Council of Independent Colleges to plan and hold these summits, with grant funding from the Institute of Museum and Library Services. The summits brought together representatives from 22 postsecondary institutions, including senior librarians, chief academic administrators, and institutional researchers, for discussions about library impact. Fifteen representatives from higher education organizations and associations also participated in the summits. A report summarizes the discussions at the summits and presents recommendations based on four broad themes about the dynamic nature of higher education assessment:

- Accountability drives higher education discussions.
- A unified approach to institutional assessment is essential.

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• Student learning and success are the primary focus of higher education assessment.
• Academic administrators and accreditors seek evidenced-based reports of measurable impact.

Building on the findings of these summits, ACRL designed Assessment in Action: Academic Libraries and Student Success (AiA), a professional development program to strengthen the competencies of librarians in assessment, campus leadership, and data-informed advocacy about library value. In partnership with the Association for Institutional Research and the Association of Public and Land-grant Universities, ACRL received a second grant from IMLS to implement AiA. The Council of Independent Colleges is serving on the project’s advisory board. During the three-year AiA project (2013-2016), over 200 institutions will participate in the program. As described in this report, the AiA projects are connecting academic librarians with campus partners in novel ways to examine and discover how they bring value to their institutions.
APPENDIX B: Final Report Template for AiA Team Leaders

DOCUMENT 1: Institutional and Library Profile

Note to Team Leaders: This section will be pre-populated for you with information from NCES and other existing public data sources. Team leaders will not be able to edit this section.

1. Name of institution
2. Basic classification
3. FTE enrollment
4. U.S. Regional Accrediting organization
5. Sector Affiliation
6. Fiscal Affiliation
7. Information literacy is student learning outcome for institution
8. Total librarians and other professional staff
9. Total library expenditures (salaries and wages, materials and operating)

DOCUMENT 2: AiA Project Description

Directions to Team Leaders: Please tell us about your project. All the information in this project description section will be publicly searchable. Be sure to proofread/spell check before you submit. We will be publishing the information exactly as you enter it, without review. You can start the report, save, then come back and complete it later. You have until June 23 to complete this section of the report.

1. Primary outcome examined (select one or more)
   o student learning: assignment
   o student learning: course
   o student learning: major
   o student learning: degree
   o student engagement
   o student experience
   o student success
   o academic intimacy/rapport
   o enrollment
   o retention
   o completion
   o graduation
2. Primary library factor examined (select one or more)
   o instruction
   o instruction: games
   o instruction: one shot
   o instruction: course embedded
   o instruction: self-paced tutorials
   o reference
   o educational role (other than reference or instruction)
   o space, physical
   o discovery (library resources integrated in institutional web and other information portals)
   o discovery (library resource guides)
   o discovery (from preferred user starting points)
   o collections (quality, depth, diversity, format, or currency)
   o personnel (number and quality)
   o Other (please describe) : _____________

3. Student population (select one or more)
   o undergraduate
   o graduate
   o incoming
   o graduating
   o pre-college/developmental/basic skills
   o Other (please describe) : _____________

4. Discipline (select one or more)
   o Arts
   o Humanities
   o Social sciences
   o Natural sciences (i.e., space, earth, life, chemistry, or physics)
   o Formal sciences (i.e., computer sciences, logic, mathematics, statistics, or systems science)
   o Professions/applied sciences
   o English composition
   o General education
   o Information literacy credit course
   o Other (please describe) : _____________

5. AiA team members (select one or more)
   o assessment office
   o institutional research
   o teaching faculty
   o writing center
6. Methods and tools (select one or more)
   - survey
   - interviews
   - focus group(s)
   - observation
   - pre/post test
   - rubric
   - Other (please describe): _____________

7. Direct data type (artifact) (select one or more)
   - student portfolio
   - research paper/project
   - class assignment (other than research paper/project)
   - Other (please describe)

8. Indirect data type (select one or more)
   - test scores
   - GPA
   - degree completion rate
   - retention rate
   - Other (please describe): _____________

9. Executive Summary
   (150 words open)
   **Prompts:**
   - How does the project align with your institution’s priorities and needs?
   - Why did you choose the outcome and library factor as areas to examine?
   - What was the project’s primary inquiry question?
   - Why was the team composition appropriate?

10. Contribution
    (150 words open)
    **Prompts:**
    - What are the significant contributions of your project?
    - What was learned about assessing the library’s impact on student learning and success?
    - What was learned about creating or contributing to a culture of assessment on campus?
    - What, if any, are the significant findings of your project?
11. Conclusions, Implications, and Recommendations
   (150 words open)
   Prompts:
   • What will you change as a result of what you learned (e.g., institutional activities, library functions or practices, personal/professional practice, other)?
   • How does this project contribute to current, past, or future assessment activities on your campus?

12. PDF of poster (Permitted file types: pdf, doc, docx, rtf, xls, xlsx, csv, jpg, jpeg, png, gif, tif, tiff, ppt. Maximum file size is 5 megabytes.)
   (upload)

13. More information
   (150 words open)
   Prompts: Please list any articles published, presentations given, URL of project website, and team leader contact details.

DOCUMENT 3: Reflective Report

Directions to Team Leaders: Please tell us about your experiences working on your project and being part of the AiA learning community. The information for this reflective section of the report remains confidential and will never be public or searchable. Karen Brown, our project analyst, will analyze this section across the entire AiA team leader group to see if there are patterns by type of institution, type of outcome examined, type of method/tool used, etc. She will synthesize and report without any identifying information. You can start the report, save, then come back and complete it later. You have until June 23 to complete this section of the report.

Project Experiences

1. What contributed to the success of the project?

2. What problems or delays did you encounter? How did you address or resolve these problems?

3. How has the project contributed to assessment activities on your campus?

4. Thinking about your campus assessment team, what factors contributed to a positive experience for the team members?

5. Did your campus assessment team encounter challenges during the project as a result of group dynamics, roles, assumptions, expectations, or other issues? Please explain and indicate how you or other group members addressed the challenge(s).

6. How has your campus assessment project changed administrators’, faculty, and/or students’ perceptions of the value of the library?
7. What have been the reactions of other library staff to your involvement in this project?

8. How will your library and institution use the results of the project?

9. How will the assessment activity created through the project be sustained on your campus?

**AiA Cohort and Community of Practice Experiences**

10. Describe 2-3 meaningful experiences within AiA that contributed in significant ways to your action learning project (e.g., your cohort, Moodle activities, in person meetings, other means). Why were they significant?

11. What specific competencies or insights have you gained as a result of the AiA experience?

12. What information or resources were particularly useful to you during the project?

13. How have your AiA experiences influenced your professional practice? What difference has it made to your performance? What has it enabled that would not have happened otherwise?

14. How prepared are you now to lead similar projects?

15. How have your learning and experiences contributed to and enriched the AiA community of practice?

16. If you were given the opportunity within AiA to focus more deeply on one more element, theory or concept, what would that have been?